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Concentrates on defining the working philosophy of the institution and outlining its corresponding objectives. Recommendations focus on the university's four main objectives: (1) to maintain a high level of quality in education in light of increasing enrollment and increased demands on faculty and curricula; (2) to establish the university as a graduate and research center; (3) to develop favorable public relations and new areas of financial support; and (4) to promote interinstitutional cooperation and establish the university as the focal point of public higher education in Massachusetts.

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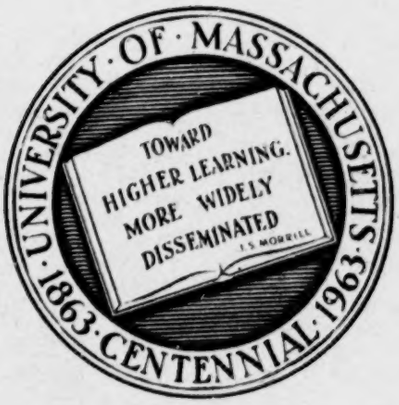
1962 REPORT
of the
Long Range Academic Planning Committee



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JUNE 5, 1962
UNIVERSITY OF MASSACHUSETTS
AMHERST

ED000874

The Commonwealth of Massachusetts

University of Massachusetts

Amherst

June 5, 1962

To: The President and the Faculty Senate of the University of Massachusetts

It is my privilege, on behalf of the Long-Range Academic Planning Committee, to transmit to you this first Report of the Committee. The comparative brevity of the Report is no index of the time and effort that have gone into it. Since first receiving its charge, in February of 1961, the Committee has carried on four main lines of study: (1) examination of general principles and concepts; (2) background readings and information; (3) off-campus consultations; and (4) a series of information sessions with Deans, Division Heads, administrative officers, and visiting consultants.

In the Fall of 1961 the Committee moved into an additional phase of work by focusing upon selected areas in need of critical study. Individual members prepared working papers which served as the basis for Committee discussion. Subsequently, a sub-committee composed of Dr. Albert Anthony, Dean William Field, Dr. Robert Kleis, and Dr. Leo Redfern (chairman), prepared a draft report. What is here transmitted is a revised version of the draft that has run the gauntlet of criticism of the entire Committee. It represents a cumulative process of thinking which has evolved into consensus.

This comprehensive consensus is meaningful in view of the continuing divergent points of view of Committee members as individuals. Yet it testifies to the effectiveness of the educative process that has been at work upon the Committee. It is a viable synthesis based upon understanding, mutual respect, and due regard for individual, as well as collegiate, points of view.

One of the forces uniting us has been an overwhelming awareness of the urgency of the educational challenge which our Committee was called upon to face. Another has been our deep conviction of the enormous potential of our University. And a third has been our deep faith in our collective capacity to release this vast potential. The accumulated experiences, materials, and cooperative spirit of the Committee are now valuable resources, in and of themselves, which stand ready to be put to further productive use.

The value, to others, of the Committee's efforts, as partly reflected by this Report, we have yet to find out - through its wide circulation and the discussion thereby engendered. The values to the members of the Committee are not in doubt. They are real and they are great.

Respectfully submitted,

Maxwell H. Goldberg

Maxwell H. Goldberg, Chairman
Long-Range Academic Planning Committee

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"The role of the universities is undergoing a remarkable change. They are being thrust into a position of great responsibility in our society -- a position more central, more prominent, more crucial to the life of the society than academic people ever dreamed possible.

"I should like to see the universities debate their role in society as fully and vigorously as they have debated the other great issues of academic life. Whatever the outcome of that debate, I should like to believe that everything the university undertakes in the world of affairs...would bear the indelible stamp of the university's style, in the kinds of objectives sought and in the manner of approaching those objectives."

JOHN W. GARDNER

The University In Our Civilization

PREFACE

Considering that the University of Massachusetts is about to enter upon its second one hundred years of service, it is rather surprising to learn that, not very long ago, this institution was, though distinguished, a small agricultural college. In fact, it was not until 1947 that the institution became a university. In the majestic rise and unfolding of the university idea in Western Civilization, the University of Massachusetts, comparatively speaking, has barely arrived upon the scene. Yet, in the brief space of the past decade, it has grown rapidly in size and scope. Proportionately, it is among the fastest-growing universities in the nation. And its potential, in a relatively populous and prosperous state, is great.

All this combines to provide a sense of challenge and of opportunity. It contributes to a climate of ferment, change, and innovation. It calls forth demands for determining identity, formulating purpose, and sustaining development. To meet this challenge constructively requires planning. The Committee preparing this interim Report was created to provide some of the long-range academic phases of this planning process.

Rarely, in the lifetime of a scholar, does there exist an opportunity such as is now present at the University of Massachusetts to make a direct, personal and individual impress upon the character, identity, and future of an academic institution. The members of the Long Range Academic Planning Committee feel privileged to be called upon to attempt this type of contribution.

We hope our work will facilitate the opportunities our colleagues have to create a new and enduring sense of identity for the University as an academic institution in the service of the Commonwealth, the nation, and the world.

THE RATIONALE FOR LONG-RANGE ACADEMIC PLANNING

Planning is a familiar activity. In one form or another, every organized effort engages in planning. But it does not follow that an institution having within its confines the plans of many individuals (who tend to be strongly individualistic) is necessarily engaged in institutional planning. There must be a definite commitment to organize the many particular plans within an over-arching framework.

It seems clear that the faculty Senate and the administration, in creating this Committee, believed the University of Massachusetts could benefit from comprehensive institutional planning.

In approaching our task, we have tried to keep constantly in mind the long view of University development. We are fully aware that the past and present are the inevitable prologue to the future. But in taking into account short-run developments, which have an admitted influence on long-term growth, we have endeavored to regard the current scene as capable in time of any modification.

Because of this focus, our concerns have characteristics which contrast in significant ways with short-range plans, of which the annual budget is a classic example. The amount of detail in which we get involved will, on the whole, be decidedly smaller. There will be more concern with the <u>desirable</u> than with the <u>practicable</u> (though we hope we have been sufficiently realistic to avoid any profound dichotomy between the two!). We have labored to establish -- on however tentative a basis -- that level of idealized vision which might still be within the realm of the possible, given sufficient purpose and plan.

We have felt that long-range planning should attempt, no doubt among other things, to identify benchmarks for "a reasonable prospect of success."

In this, we are conscious that a premature attempt to move from idea to practice can just as well deprive a current activity of needed support as it can promote desirable innovations.

This has led, in turn, to attention with balance (by which we do not mean to say égalité) among the constituent units of the University. A sense of right relationship is sought when thinking in terms of numbers of students, size of staffs, amount of clerical support, units of organization, and the quantification of accomplishment. From this has emerged a concern with minima, as well as maxima, on the grounds that institutional character is conditioned at least as much by the minimum level it accepts as by the maximum good it professes.

We have benefited, in addition, from the concepts of Mr. Gordon P. Smith, a well-recognized consultant in the field of management planning, who is, we are proud to say, an alumnus of the University. Mr. Smith suggests, and we have followed this to a limited extent, a sequential approach to effective planning. The sequence consists of the following steps, in order of priority:

philosophy

objectives

program

organization

staffing

facilities

financing[1]

---

[1]For those who desire to explore further Mr. Smith's approach, we recommend "Planning for Educational Institutions," an excerpt of a speech delivered by Gordon P. Smith, partner in Booz, Allen & Hamilton, management consultants, in San Francisco. Limited copies are available from the Committee Chairman, Professor Goldberg. This sequence also is similar to that suggested by A. F. Emch in Long Range Planning for Colleges and Universities (1958).

By and large we have concentrated our efforts on the first two steps -- that of philosophy and that of objectives. The areas of program and organization begin to merge with what might be called "operational" or perhaps "departmental" responsibilities and prerogatives. The specifics of staffing, facilities, and financing we have altogether avoided treating in extended detail. At the present time it seemed to us that prior steps in the sequence deserved our primary attention. We are not unmindful, of course, that institutional growth can develop and has developed in exactly the reverse sequence from that which we have accepted. Perhaps this has been part of our real challenge as a Committee on long-range planning.

Nevertheless, we have consistently felt a more obvious challenge. This has been to avoid exalting the pious platitude (which is either too general to be defined in mutually understandable terms, or so innocuous as to be lacking in meaning), while at the same time to resist involvement in the comforting business of minute detail (which at this point is too time-consuming to be worthwhile or too inhibiting to allow a necessary element of boldness).

Another point deserves mention. We know that one role of planning is to present alternatives, and to leave to others the appropriate choice of alternatives offered. With few exceptions, we have rejected this role. We have done so for several reasons. For one thing, events are now moving so rapidly that open-ended choices do not remain available for extended periods of time. For another, our responsibilities demand that we at least offer a structured situation in some areas where a sharp focus for debate and discussion is needed. We hope that such discussion will be forthcoming.

In an academic environment discussion is prelude to acceptance, and acceptance is the prerequisite for effective action. The administration must be committed to a long-range plan, and the entire University community must understand this commitment -- and accept it. Such acceptance need not be individually and unanimously, but on balance it must involve the moving forces in the institution. This, we feel, allows room for dissent in terms of urging modification of the plan rather than in terms of action inconsistent with the agreed-upon goals.

This type of planning engenders certain obligations. The failure to accept these has been the downfall of many institutional plans and self-surveys. The obligations are these: to gain acceptance through understanding and modification where necessary, to develop policies for moving toward the goals, and then to take action consistent with these policies. This also requires prompt communication of policies and proposed changes -- especially in the period of original formulation.

Needless to say, whatever is envisioned in the future as an ideal or objective will not be completely realized. Therefore, the long-range plan must stay under some form of continuous review. It will require on the part of those responsible for its accomplishment, some system of priorities and a strategic sense for adjustment as events unfold. In the continuing process of long-range planning at the University, it is imperative that attention and thought be given to the orderly arrangement of priorities and strategies appropriate to long-range objectives.

The merit of planning is not solely the commitment to specific results but also the establishment of benchmarks to provide for greater general meaning and purpose. This, we must have in our institutions, as in our individual lives. This interim Report is designed to serve as a contribution to the building of benchmarks that may provide a greater sense

of identity within the community of scholars we call our University.

We hasten to add that we are well aware of the discrepancy between what we have been able to achieve in this Report and the ideal document for effective long-range planning. It is our fervent hope, however, that this Report will clear the way and provide a firm basis for the definitive long-range presentation that should complete the present effort.

We recognize that we have not achieved the all-pervasive sense of a particular kind of future which we need to identify and communicate. What follows, nevertheless, has its merits. Some elements of genuine long-range planning may be readily identified among our preliminary statements of problems, recognition of current needs, examples of past accomplishments and miscellaneous observations which we wish to communicate. We have found a great deal which yet needs to be done in order to build a truly comprehensive long-range plan. This remains the challenge and the opportunity for further efforts in this direction.

A WORKING PHILOSOPHY FOR THE UNIVERSITY

The University of Massachusetts is a land-grant institution of higher learning largely supported by and responsible to the Commonwealth of Massachusetts. As such, the University carries a strong mandate for rendering appropriate educational services on behalf of the people, the Commonwealth, and the common good. But as an institution of higher learning, it also carries a primary obligation to other universities to uphold intellectual standards and ideals.

The Multiple Role

This concept of the multiple role of the University includes the responsibility of providing educational services both on and off campus, of teaching both youth and adults, and of training intensively for specialists and broadly for all. It stands ready to serve the people, both individually and collectively. It provides educational assistance to the rural community and the urban metropolis. It works in the service of the State, the nation, and the world, whenever and wherever the capacity for unfettered rational thought should be valued and sought. In all such services its motivations are both those of altruism and those of enlightened self-interest.

The University renders appropriate educational service through three major instrumentalities: teaching, research, and extension. It has a responsibility to see that these instrumentalities are cooperatively and creatively related to one another both structurally and functionally.

In stating that the mandate of the University is to render appropriate educational service, the term appropriate implies judgment and standards. Judgment and standards are the constructive and the controlling factors of

University life. These, in turn, are derived partly from the noble tradition of the university system in the western world. This is an eight-hundred-year-old tradition based on the essential unity and dignity of higher learning and stressing the spirit as well as the process of learning. This is the tradition that insists upon a distinction between education and indoctrination and rejects the latter. This is the tradition that respects curiosity and questions rigid conformity.

Excellence and Equality

Yet another heritage of the ancient university idea has been the concept of excellence in all things of the intellect. To this has been welded the special American contribution to higher education, the dimension of equality of opportunity. This amalgam of excellence and equality has been the dominant problem and the greatest promise of American public higher education.

Hence, in each phase of quantitative expansion, the University must at the same time bear in mind the urgency of its commitment to excellence. Our very survival, not only as an institution, but as a society, depends upon the ability to bring about a creative accommodation between the expansive quantitative thrusts and the guiding qualitative standards embodied in the idea of a state university. The University must meet this challenge if it is to justify its role of being the capstone of public higher education in the Commonwealth.

The location of the University in the New England region has important implications for the dynamic process of accommodation between quantity and quality. The private institutions of higher learning in the region in the past were capable of handling a major proportion of the quantitative demand for higher educational opportunities. This is less true today.

Because many of their students are drawn from outside the Commonwealth, and because of the high cost for their students, these colleges and universities do not meet the total educational needs of the people of the Commonwealth. This, in turn, has placed a larger measure of responsibility upon the State University to meet the problem of providing appropriate educational opportunity. We believe the University of Massachusetts must accept this responsibility. But in so doing, we assert the obligation to carry this responsibility without detriment to its concurrent obligation for the achievement of excellence. For this, too, is a responsibility it has as a member of the university world.

Four Developmental Areas

To implement its institutional philosophy, the University of Massachusetts must move with vigor and imagination in teaching, research, and public service. This requires close attention to four main developmental areas:

1. Public higher education in an increasingly urbanized and industrialized society.
2. Public higher education in a time of increasing international relationships.
3. Public higher education in a period when systematic learning is becoming more widely recognized as a lifelong need.
4. Public higher education in response to the growing need for critical thinking and rational thought.

The working philosophy of the University of Massachusetts does not lie within the covers of a committee report. That is why we have deliberately called it a working philosophy. It is, rather, that sense of purpose which motivates our students and our staff in their daily efforts and long-range plans. It is the feeling of mutual identity which characterizes the work

of our Board of Trustees, the administration, the faculty, the supporting services, and the students. It is the shared sense of responsibility among these members of the University community which makes possible the achievement of goals far beyond the reach of any single part. It is the sense of shared identity which leads, we believe, to the fulfillment of the role of a land-grant State University in the best interests of the people.

THE OBJECTIVES OF THE UNIVERSITY

In setting forth an array of objectives for the University, this Committee makes no claim to presenting a definitive master plan of institutional growth and development. Undoubtedly, there are vital areas of University life which have been omitted from our purview, such as those of athletics and extra-curriculum activities. We further recognize that some items have been treated more scantily than they deserve. Nevertheless, we hope to have met, in large measure, the first stipulations of the full charge placed upon us. We visualize that this interim Report, and the objectives it sets forth, will serve as the basis for discussion, debate and ultimate consensus among the members of the University community. We hope we have identified those major areas of potential development which now require action by appropriate units of the University. And, finally, we have endeavored to highlight areas of vital importance to the future of the institution which now warrant further intensive study and planning.

Four Major Objectives

From our studies we have derived four major objectives for the University of Massachusetts:

I. To provide university education of high quality for increasing numbers of qualified young people, adhering to the state university principle of low tuition cost to the student. This objective includes the provision of extra challenge and incentive for development of the gifted student, and, as special conditions may warrant, appropriate sub-baccalaureate education.

II. To establish the University as the graduate training center of public higher education in the Commonwealth, with increasing emphasis on graduate work of high quality up to and including

the Ph.D. or equivalent. As an integral concommitant of this goal, the University would serve as a center for research and creative activities appropriate to an institution of higher learning and would serve, also, as a major center for the training of professional and advanced technical personnel.

III. To develop further the University commitment to, and ability to render, public service to individuals, organizations and units of government through the use of University staff, facilities and resources, both on and off campus.

IV. To serve as the capstone of publicly supported institutions of higher education and as a focal point for higher education programs in the Commonwealth of Massachusetts.

We believe that these major objectives are in harmony with the philosophy of a land-grant state university. We are convinced that these objectives aid in spelling out the Centennial theme of the University as it completes one hundred years of distinguished service and looks to the future: "Toward Higher Learning, More Widely Disseminated."

I

"To Provide For High Quality University Education..."

For some time we will be facing large increases in the numbers of college-age youth (18-21 years old) in Massachusetts. In addition, historically there has been a rising proportion of this college-age group actually going on to college.

We know what the numbers of college-age youth will be for the next fifteen years, for they have been born and are with us now. At the present time, 1962, there are 285,000 Massachusetts youth in this age category. By 1976 there will be approximately 406,000 college-age youngsters.

Enrollment

On the basis of this population explosion in college-age youth, and given the resources available, or potentially available, we visualize University enrollments rising in the following magnitude:

YEAR (Sept.)	MASS YOUTH 18-21	TOTAL UMASS ENROLLMENT	% ENROL. TO MASS YOUTH	UMASS UNDGRD. ENROLL.	UMASS GRAD. ENROLL.
1962	284,954	7,450	2.6	6,600	850
1963	291,873	8,300	2.8	7,200	1,100
1964	301,180	9,100	3.0	7,740	1,360
1965	320,331	10,000	3.1	8,345	1,655
1966	338,858	11,000	3.3	9,080	1,920
1967	355,917	12,000	3.4	9,840	2,160
1968	357,846	13,000	3.6	10,730	2,270
1969	351,395	14,000	4.0	11,687	2,313
1970	352,849	15,000	4.3	12,510	2,490
1971	360,998	16,000	4.4	13,316	2,684
1972	371,278	17,000	4.6	14,050	2,950
1973	380,043	18,000	4.7	14,740	3,260
1974	392,473	19,000	4.3	15,520	3,480
1975	400,285	20,000	5.0	16,290	3,710
1976	406,014	21,400	5.3	17,415	3,985
		Percent (1976) of Total UMass Enrollment - 81%			19%

This is a very conservative program of enrollment growth when viewed against the growing needs for higher education in the State.

We are well aware that calculated assumptions must underlie these projections, including the expectation that there will be some expansion in the number of educational places in private institutions, the anticipation that the regional community colleges and the state colleges will assist in handling the tidal wave of applicants, and the premise that there will be a modest addition of new schools or colleges within the University. These are conservative estimates, in our opinion. They are based on a 1% per year increase in the proportion of Massachusetts youth going on to college (the actual increase for Massachusetts high school graduates has varied between 2% and 3% annually since 1952 and now includes about 36% of this age group). Yet they are, we believe, manageable numbers for the University to handle without jeopardy to standards of excellence. At the same time this expansion is the minimum level of responsibility which the University must assume as its share of the burden in the face of rapidly rising demand for college-level education.

Admissions

We are of the opinion that undergraduate admission should continue to be on the basis of admission to the University as a whole, with complete freedom of choice for the student to select the College or School in which he desires to study. The alternative would be the development of special admission requirements for each component of the University. We believe this alternative would be confusing to applicants, administratively complex, and counter to the sense of identity with the University as a whole which we are seeking.

We recognize that there may be necessary exceptions to this general policy. This may be true in specialized curricula, as nursing, or where professional accreditation standards must apply. We urge, however, that

when exceptions are necessary, they be made in positive terms and be in addition to normal University standards.

We know the general policy for admission will continue to be based upon academically qualified candidates - without considerations of race, color, creed, class, or sex.

Admission Standards

Standards utilized for admission should be developed on a multiple-method approach, with different methods of qualifying based upon the results of institutional research into admissions criteria and effectiveness. We recommend that such research be encouraged and supported.

The use of a single, combined College Entrance Examination Board (CEEB) score, high school rank, and principal-recommendation index is understandably useful. It is easily justified and explained to all who have an interest in the matter. Nevertheless, it falls short of including a variety of relevant factors, especially that of potential in unusual students.

We would prefer to see a multiple track approach, including but not limited to the criteria set forth above, which would permit some students to qualify under one system and some under another. While such an approach would be more difficult administratively, it offers the possibility of diminishing the present strong reliance of colleges and universities on the CEEB scores and class rank. It would require closer liaison with secondary school counseling and guidance officers and thus assist further in improving articulation with the high schools. We should take all possible initiative in using procedures to encourage potential high-performance students, who may not have compiled distinguished records under the present indices, to apply for admission. This is a group of valuable

young scholars, many of whom may well be overlooked if standards are based on too rigid a formula.

As to admissions into the Graduate School and the Stockbridge School, we have not studied these areas sufficiently to be prepared to make recommendations at this time.

The Student Body

We do not perceive it to be our responsibility to judge what the enrollment and admission patterns will be among the various schools and colleges of the University. We do suggest that this is an area deserving of intensive and rather immediate study, however, in order to assist the deans and directors with their divisional plans and programs.

As the center for public graduate training in the State, we anticipate an increasing proportion of the total student body will be composed of graduate students (rising from 12% in 1962 to about 19% in 1976). We point out, in passing, that this development can greatly aid the teaching of undergraduate students as well as facilitating research at the University.

Graduate students as a cosmopolitan group bring an additional benefit that we ought to encourage to a greater extent at the undergraduate level. These students represent different regions and varied cultures. While our service obligation to the young people of Massachusetts is unquestioned, we must admit out-of-state students in the numbers necessary to develop the desired heterogeneity characteristic of a university devoted to high quality. This is more than a matter of intellectual and cultural cross-fertilization. As a practical matter, we recognize that an estimated 17,880 Massachusetts youngsters are presently attending colleges and universities in other states; many of these in public institutions. Unless we show some willingness to offer a modest reciprocal opportunity, these

states are going to refuse to take future applicants from our Commonwealth. This will place a severe burden on our own public institutions to make places available to these qualified students. It is more sound, economically as well as educationally, to offer some opportunities at our University to students of other states.

SCOPE

The activities of the Special Committee on Promising Entrants (SCOPE) give promise of contributing greatly to the program of encouraging highly qualified young people to consider opportunities available at the University. We commend this program and hope for a continuation of similar activities. In this connection, we also recognize and applaud the advances made through Freshman Orientation, one-day registrations, and IBM scheduling of classes and room assignments. These advances have facilitated the students' introduction to the campus and expedited their efforts to move rapidly into the important academic business of study and classes. We note with pride that in using electronic data processing (EDP) methods for class scheduling, the University of Massachusetts is among the national leaders in this new area of academic administration.

Transfers

We wish to call attention to the situation of the transfer student as part of the student body. The number of transfer students coming to the University is likely to increase. This will be due to the increasing diversity of undergraduate and graduate program offerings which provide more opportunities, and especially to the expanding regional community colleges which will encourage and prepare a considerable number of young people to continue their studies to at least the baccalaureate level.

We recommend that a special study be undertaken on the problem of transfer students in order that an assessment may be made of the potential impact from this class of admissions. We also recommend that equitable policies and procedures be established to promote this development in a constructive fashion. In our judgment this is especially important in regard to the graduates of the regional community colleges, to which we refer at greater length later in this Report.

Student Assistance

We recommend that the counselling and guidance services of the University be expanded during the pending period of growth. This will be especially urgent with increased enrollments, more transfers, and if the multiple-method approach to admissions is adopted wherein very promising but unusual students are admitted.

Student financial aid is not keeping pace with growing enrollments. At present the estimated cost of attending the University is $1400, which includes only the basic necessities of tuition, books, room, board, travel, and personal items as laundry. The great need for scholarship aid may be seen by examining the over 1300 applications received from freshmen for the 25 freshman scholarships which are available. The average grant awarded in scholarship aid of all sorts to University students is limited by inadequate resources to $208. Of 400 upperclassmen who met our rigorous criteria of financial need, scholarships could be granted to only 125 students. (These are in addition to the 75 Commonwealth Scholarships provided by the General Court.) Money available for scholarships, loans and 03 funds (state funds for temporary, part-time student labor) has not kept pace with increasing costs and expanding enrollments. The alternatives facing us in this situation, of either spreading available money more thinly (and inadequately) or

of denying a greater proportion of our students any assistance, are not alternatives which are conducive to providing reasonable educational opportunities to deserving young scholars.

We firmly endorse a recommendation that the University assign a high priority to the objective of securing more adequate sources of financial aid to the students. An organized effort should be made to increase the endowment funds for scholarships and loans. The relatively small, but nevertheless helpful, amounts of money given by the students themselves for loans to more needy students are praiseworthy, indeed. But this falls far short of present needs. Vigorous requests should be made for additional state funds to expand the number of Commonwealth Scholarships available to students, as well as for funds to enable the University to arrange federal loans under the National Defense Education Act for our students. Last year, we were forced to terminate loans from NDEA funds by December of the school year because we lacked the necessary money to match the federal funds. When it is known that each dollar of University money, available for such loans, can attract nine dollars of federal money, it can readily be seen how much prospective improvement can be made in this area.

We would be remiss if we did not mention our belief that in working to expand the scholarship program, the University ought to make provision for developing attractive (perhaps mainly honorary) scholarships based on intellectual ability and promise rather than on need. Outstanding students who may not be in great financial need may be attracted to the University by the awarding of special scholarships, even though these carry only a token award of money. The value of this type of scholarship lies mainly in the recognition it provides to promising scholars, as is done under the merit scholarship grants of the National Merit Scholarship Program.

Scholarly Incentive

In addition to honor scholarships, continued efforts beyond the University Honors List are required to promote scholarly incentive. The University must encourage continued development of the Honors Program at all levels and in all areas where appropriate to the maximum development of student potential.

In the same vein, we must encourage the further growth of accelerated placement whenever such a program aids in the maximum intellectual development of our students. This requires continued attention to the early identification of outstanding students, the development of curricula or procedures into which an accelerated program can be meshed, and the promotion and publicizing among students of the opportunities available for accelerated study, including the two 5-week summer session programs. The summer sessions, in effect, have placed the University on a year-round basis of operation.

We would suggest that the Graduate School take the initiative in exploring ideas and avenues by which graduate standing might be made available, on a concurrent basis, to outstanding undergraduates. The integrated-accelerated approach to professional and advance study is gaining momentum in selected universities in this country. We believe that our University has a similar obligation and that such an assessment is particularly appropos at this juncture in our institutional growth.

Curricula

The study of curricula development in an institution as large and diverse as the University of Massachusetts is a major project in itself. We have not attempted within the time and resources available to us to make a thorough study of this area. Yet we are keenly aware that this is an area which requires close and competent scrutiny.

It is our recommendation that means be provided for the specific purpose

of fundamentally exploring the curriculum. We suggest that special attention to academic and graduation standards, appropriate to the University's over-all objectives, be provided for in any such study. If this is done, we further recommend that funds be made available for the necessary purposes of retaining consultants, allowing visitations, and providing for dissemination of findings. We feel that in order that proper attention be devoted to such a project, the chairman or director, if selected from the faculty, be granted released time from his normal academic duties for the purpose of guiding and stimulating this major work.

We acknowledge the general principle that curricula development and revision is largely the responsibility and prerogative of the respective schools, colleges and departments. We therefore urge continued collegiate and departmental review of current programs and offerings. Such review would, in fact, facilitate the work of any committee assigned to the area of curricula development.

University Program Growth

Certain features of University programs have come to our attention which warrant further consideration. Action on some of these need not, in our opinion, await a comprehensive or detailed study and we cite such situations at this time. The Committee considers that the most effective program for growth of the University would include the following methods:

1. By providing appropriate sub-baccalaureate education in areas of need where the University is traditionally or uniquely qualified to render such services. Such programs should be handled differently from the regular baccalaureate programs; and the responsible collegiate groups, in establishing priorities for prospective sub-baccalaureate programs, should continue to maintain the quality of existing programs.

2. By review of the present Reserve Officers Training Corps (ROTC) program, with a view toward adoption of a voluntary program in line with the trend in other universities and in the military establishment itself.
3. By substitution of new, dynamic subjects in place of those that may have declined in educational value.
4. By elimination of subjects, if any, no longer relevant to University level training or objectives.
5. By adjustments in certain existing courses of instruction on the undergraduate level to take into account the new programs being introduced into the secondary schools, as in the fields of mathematics, physics and biology.
6. By the introduction of courses in fields emerging as vital to national cultural and welfare goals, such as Slavic Studies and the History of Science.
7. By initiation of new courses within existing departments, for example, Portuguese in the Department of Romance Languages.
8. By reorganization - as was done, for instance, in the Department of Microbiology.
9. By amalgamation of pairs or groups of subjects, as exemplified by the Department of Entomology and Plant Pathology.
10. By creation of new departments where educational service on the departmental scale is appropriate, as is perhaps the case of Astronomy, Geography, and Materials Science.
11. By addition of major divisions where an obvious need or demand exists for further low-cost professional education, as in a Medical Center, a Law School and a School of Labor Relations.

12. By assessment of the need and demand for training in such professional occupations as architecture, communications, librarianship, oceanography, occupational therapy, physical therapy, and veterinary medicine.
13. By encouraging the clarification of University policy in regard to the creation of Institutes. Such a policy should recognize college or departmental authority and responsibility. At the same time it should encourage an interdisciplinary approach.
14. By assignment of adequate personnel and equipment for the comprehensive needs of the educational community, as in computer technology, statistics, and audio-visual services.
15. By careful study, as is now being done by a special committee, of the feasibility and desirability of establishing a University Press.
16. By establishment of off-campus branches for such specific purposes as extension graduate education (without compromising residence requirements) and informational services.
17. By further development of University resources to meet the growing need for adult and continuing education.
18. By analysis of the ability and desirability for University cooperation in programs of international assistance and development, with emphasis upon cooperation with other colleges and universities.
19. By consideration of the status of University operations in terms of year-round activity and full use of University academic resources.
20. By exercising initiative in developing cooperation and coordination among state institutions of higher education to bring about a system of maximum utility and value to the citizens of Massachusetts.

We know that this type of development will require greater effectiveness in teaching through improvement in personnel, techniques, organization,

equipment, facilities and ancillary services. In subsequent sections of this Report we touch in somewhat greater detail on some of the methods we have suggested, as in the Medical Center proposal and the recommendations on inter-institutional cooperation. For the moment, we can summarize our position by stating that the above twenty steps in University development are the type of response we envisage as being necessary to meet the emerging educational needs cited earlier in the section on the working philosophy of the University. Through such an approach as we have briefly outlined, it will be possible for the University to serve an urbanized and industrialized society which has growing international and intercultural relationships and where learning is increasingly recognized as a life-long process of enhancing the power and value of critical and rational thought.

Faculty Development

Student-Faculty Ratio. We do not feel that it is possible, in the foreseeable future, to increase the student-faculty ratio without danger of jeopardizing the quality of the University's educational program. We reaffirm this position because there is some current belief that new teaching methods and aids will permit an effective increase in the number of students per teacher. We hope that experimentation and testing will continue with new techniques and learning situations, in order to provide for more effective use of teaching staff. We must, and undoubtedly will, make progress in these areas; for, as our honors, graduate and professional training programs expand with their relatively low student-faculty ratios, there is a need to conserve faculty resources in order to maintain the same over-all current ratio. The pressure to decrease this ratio to 12-1 or even 10-1 will be great in order to develop our goals of excellence in special programs.

At this point we would like to emphasize our strong feeling that in the

preparation of collegiate and departmental budgets, adequate allowances be made for the enriched program of studies which have developed in recent years. There is a belief that load formulas and other indices used in budget justification and analysis are based on more traditional standards of undergraduate teaching. Thus, new departures such as honors programs and graduate courses are not adequately accounted for in allocating budget resources. Average formal teaching loads will have to be reduced to encourage research and special teaching assignments as thesis and dissertation supervision. We therefore recommend that appropriate indices be developed for such purposes by those responsible for budget decisions, and that the faculty be invited to participate in this process. It follows that any new indices established would be made known to those planning new academic programs as well as to those having normal budget responsibilities.

The faculty of any medical school should not be included in calculations of the over-all University student-teacher ratio, for to do so in such an area of very small student-faculty ratios would be only at the expense of other deserving educational programs.

Salaries. At the present time the University faculty salary schedule is not an effective competitive inducement for securing qualified staff members in a tight national market for academic talent. Our average faculty salary of $7,528 was lowest in 1960-61 of any state university in New England. At the same time, Massachusetts, with the exception of Connecticut, enjoyed the highest per capita incomes in New England. In addition, our full professors receive, at maximum, $4,600 less than the average maximum of full professors in other public universities, and our associate professors receive $2,200 less. The budget recently authorized by the General Court allows for only minor adjustments in the salary schedule.

There must be, on the average, a doubling of present salary levels within

the next ten to twelve years. This should be, and must be, among the very first of priorities in future development efforts of the University. While this is a challenging responsibility for the University, it must be faced realistically. This is the pace at which other institutions, with which we are in heavy competition for staff, are planning. Institutions which have announced salary plans have been projecting increases at the average rate of 10%-15% per year. Thus, our proposal is designed only to keep us in pace with advances planned at other institutions and is not sufficient to improve our relative standing. This would require an even greater effort.

We are in basic agreement with the Report issued by the Faculty Committee on Trusteeship and Faculty Salaries, and with the recommendations made therein for improving salary levels, ranges, and adjustments. We especially urge that attention be given at the earliest possible moment to remedying the adverse salary situation existing in the upper academic ranks.

Sabbaticals and Leave. In our judgment the present sabbatical and leave policies of the University are generally satisfactory. We should like to cite, briefly, two aspects that deserve further attention, however. With the inevitable growth of the faculty, it becomes more crucial to obtain adequate funds for support of sabbatical leaves and professional development. Though it has fortunately been able to work from year to year, the present condition is in an uncomfortable position of uncertainty as far as forward planning is concerned. A more orderly assurance of funds would place the program on a firmer footing.

We recommend, in addition, that the administration explore, and if found feasible, adopt a policy of special sabbaticals for junior members of the staff. For example, this might be a half-year of sabbatical granted, for sound professional reasons, after each 3½-year period of satisfactory service. The benefits of this policy are two-fold. First, it appears

inevitable that there will be a continuation of the rather widespread policy of hiring Ph.D. candidates who have yet to complete their dissertations. This special sabbatical policy will provide them with the opportunity to conclude this critical phase of their professional development. Second, as publication becomes an ingredient of professional advancement, the sabbatical policy will allow somewhat more opportunity for research and writing to the junior staff members, who are frequently the most sorely pressed in terms of organizing time and gaining support for research work.

Professional Travel. The authority to authorize out-of-state travel for professional development ought to reside within the University community and the decisions made, within available funds, on the basis of professional criteria. We recommend that sufficient funds be made available to fulfill all legitimate and worthy requests for such travel needs. This is one of the major methods for the promotion of professional development and scholarly attainment.

Non-Teaching Services. It is through the faculty that the major functions of the University in teaching, research and service are provided. We have discussed, in part, the teaching function and will refer later to research activities. At the moment we wish to call attention to some problems created by the demands for service activities placed upon the faculty. There are two distinct dangers, in our opinion, arising from non-teaching service, particularly committee work. One danger is that conscientious work in this area of academic activity fails to gain adequate professional or institutional recognition. Another danger is that assignment of this type of service can readily result in inequitable work-loads.

As safeguards against these dangers, we urge the following policies:

1. In drawing up University schedules, adequate time should be allowed for committee work and non-teaching services.
2. Prior to making final decisions, departments should, as a matter of

standard practice, discuss such assignments with staff members of the department.

3. In cases where, due to special competence or other unusual factors, an individual faculty member is assigned an undue number of non-teaching services, his regular assigned load should be reduced proportionately.
4. That professional services be included with teaching and research in assessing promotional potential.

Facilities for Faculty. In planning for faculty office space, we would strongly urge the University to begin with the premise that the ideal arrangement is to provide individual office space for each full-time faculty member. Another guideline we offer for such planning is to place faculty offices near laboratories and classrooms whenever possible. And a third guideline is the principle of maintaining members of a department in physical proximity to one another. Departures made from these policies, under the exigencies of the moment, should be regarded as temporary expedients only, to be remedied at the earliest feasible time.

We urge the administration, in determining staffing patterns, to provide adequate clerical assistance to faculty members. This would free the professional for work more demanding of his special skills and training. If it is not possible for sufficient clerical and secretarial help to be assigned to various departments and offices, we suggest the administration consider the advisability of creating a secretarial pool to service the most pressing needs.

Faculty Governance. We are in favor of faculty involvement and leadership, where appropriate, in policy-making and development decisions. We urge the administration to review, from time to time, ways and means by which faculty participation might be integrated more closely with University

development. We also recommend that University policy insure the participation of faculty in crucial decisions affecting the University community, such as the selection of academic administrators. The participation could take such forms as a faculty advisory committee or faculty membership on a joint screening committee with trustees and/or administrative officers. We would alert University officers to a forthcoming statement from the American Association of University Professors on the matter of faculty participation and governance in academic administration.

In presenting our thoughts and suggestions for providing high quality university education for increasing numbers of qualified young people, we do not believe that we have been either exhaustive in treating all aspects of the issue, or definitive in the sense of having arrived at ultimate solutions. We hope that we have provided a structure for further necessary discussion, an identification of areas requiring further study, and guidelines for appropriate actions that can be taken in moving toward a better realization of the major objective of providing adequate educational opportunity to the people of the Commonwealth.

II

"To Establish the University as a Graduate and Research Center ...."

Since its founding one hundred years ago and on up to the present, the University has provided undergraduate education of high quality. Emphasis in this Report on development of new program areas should not be construed as advocating diminished attention to the undergraduate program.

In Agriculture and allied sciences, the University has a long tradition of providing excellent graduate training. Yet it is only in the last few years that the University as a whole has given real thought and emphasis to graduate studies.

One reason for the relatively belated attention to graduate training at the University is to be found in a past uncertainty as to the extent of need for educational opportunities at this level. Another reason has been a proper concern that graduate programs meet a high standard. Another factor has been that, within the very limited resources available to it in the past, the University was reluctant to develop new programs that could be formed only at the expense of existing ones. Certainly it is a postulate of good planning in this area that development of graduate studies be accomplished, not at the expense of, but as an enhancement to, the basic undergraduate function of the University. We believe that this accomplishment is possible. We believe that it is necessary.

The Need for Graduate Studies

The present demand for trained personnel holding advanced degrees is far greater than the supply. And, each year, in this country, this shortage is increasing, not decreasing. During the next ten years American universities will need some 336,000 professionally trained people for replacements and additions to staff. The present national output of earned doctorates

is approximately 9,600 a year, of which but 5,800 are available for careers in higher education. At this rate we will have only 58,000 trained people in ten years to fill 336,000 positions. Even if the most optimistic estimate of an increase in graduate training is used, we would be able to train but 110,000 of the 336,000 needed.

The easiest way to transpose this situation into terms relevant to the Commonwealth is to base our thinking on proportional population figures. Thus Massachusetts will need 10,000 doctoral-level persons in the next ten years. A generous estimate is that the State is presently turning out about 500 earned doctorates each year, or half the annual demand. Since Massachusetts, compared with the rest of the nation, has an unusually large number of graduate training centers, most of these graduates have come into the State only for advanced training. More of them are likely to leave than will be coming into the State to fill our needs. Even assuming an equality of migration, we will still be short 5,000 degree-holders by 1971.

In the past ten years the graduate enrollment of the University has grown twice as fast as the undergraduate student body. While this rate of growth will not continue indefinitely, we do anticipate that the present percentage of graduate students (12% of total enrollment) will increase to approximately 20% by 1976. This development would be in line with national trends whereby increasing proportions of college students are going on for advanced training. In view of the advanced state of our society, this development is essential if our people, in Massachusetts and in the nation, are to continue to progress.

Responsibility of the University

In our judgment this means that serious graduate work, including Ph.D. or equivalent programs, should be, with few exceptions, the required goal

for our departments. Every department should immediately formulate a convincing rationale of its policy with regard to graduate study toward advanced degrees in its field. If a given department is persuaded that it should be an exception, it should present a cogent justification. Otherwise, the statement of rationale should include a description of the advanced degree program or programs to which the department is committed; and, if such program or programs are still to be inaugurated, a timetable for launching and developing the program(s). These departmental justifications, rationales, formulations, descriptions, and timetables should be submitted, through appropriate administrative offices, to the Board of Trustees. A fairly close deadline for submitting these papers should be set.

Our graduates, both baccalaureate and higher, do well at other educational institutions, in government, and with private employment. Our staff members are, in general, well qualified. There is no reason why, with a little planning and preparation, most departments of the University could not offer Ph.D. work that would be equal to that given in most universities in the United States.

This is not a matter of waiting until we are "ready." If we wait, then we shall never be ready. With very few exceptions, there should be a definite commitment in each department, not doing so already, to provide graduate work at all relevant levels as soon as adequate staff and resources can be assembled. The administration ought to give special attention to encouraging this type of development. It should be the policy of every department to hire and retain, at any cost within reach (by promotion before customary tenure or by assignment of graduate courses even if enrollments are initially small), sufficient staff who are already qualified to give graduate work. No department, if it followed these principles, would be unable to give graduate work of reasonable quality within two or three years.

To be specific, a department needs only sufficient staff time to provide 45 hours of departmental course work required for the Ph.D. or its equivalent. Since many courses can be combined appropriately with advanced undergraduate training, the graduate doctoral program should not be beyond the immediate reach of any department, with half-a-dozen or more staff members, that has done forward thinking on this matter.

We point out that an on-going graduate program can help meet the increasing demands, facing the University, for undergraduate education. Providing instruction leading to the bachelor's degree will continue to be an important function of the institution. But qualified graduate students offer the prospect of teaching assistance that will enable the departments to handle greater numbers of undergraduates than would otherwise be the case. In addition, a corps of graduate students will aid the senior faculty to pursue more creative study and original investigation and thereby render faculty positions more attractive to highly qualified personnel. An active body of graduate students is essential to assist faculty in the cooperative effort of enhancing academic scholarship and thus the good reputation of the University.

To accomplish this, however, the use of greatly increased amounts of scholarship aid is an absolute necessity. It is the rare graduate student who can pay his own way under the heavy costs of advanced training. The number of fellowships and scholarships currently offered by the University is not even adequate for the present needs of the graduate program. Specifically, something in the nature of $2,000 a year for perhaps 1500 students (or a total of $3,000,000 a year) may eventually be needed. Not all of this need be budgeted out of University funds, for some will come from grants and other sources. Yet vast as such a sum seems, it would still not be enough to do the job as completely as it ought to be done. The recommended level

of graduate student assistance would be the bare minimum necessary to sustain a quality program.

Departments should be encouraged to use an imaginative, flexible approach in adopting requirements for the doctoral degree. For example, where languages are required, we believe that the elimination of the second language requirement, coupled with a vastly greater ability to use the first language, would be an improvement. This could be accomplished by an examination system which will require the student to write an essay in the foreign language and translate from the foreign language without a dictionary. Further, a brief conversational interview by the examiner in the foreign language ought to be required. Statistics, accounting, computer training or another "tool" subject could be offered in lieu of a second language in many fields.

Plans for professional training degrees at the doctoral level, not requiring the writing of a dissertation, should be considered on their merits. Such degrees should be appropriately labelled as being other than the Ph.D., for it would be an error to de-emphasize the dissertation requirement of the Ph.D. Whatever new degrees may be developed, the Ph.D. should be kept as the highest advanced degree signifying a recognized standard in terms of breadth of culture, of professional knowledge, and of research experience and ability.

Even though one-ninth of our students are in the graduate school, nothing extensive has been done to plan for their assimilation into the campus and community. Many of these students are married and a great number of them have families. Converted rooms or attics in private homes are not adequate to the needs for wholesome family housing of these graduate students. It will also be necessary for the University to begin thinking in terms of some kind of office facilities for the graduate fellows and assistants who will be required to maintain academic contact with undergraduate students. And

a graduate lounge or refectory would be an excellent addition to the Union facilities.

The University Master Planning Council should consider, in its long-range campus planning, the kind of housing and study facilities conducive to research and the scholarly atmosphere that is needed to maintain a graduate program of high quality. We hope that private housing can meet these housing needs. If not, the University must assume this responsibility.

As the University graduate program evolves there is a constant need for awareness as to possibilities for reorganization. It is important that the University consider immediately the possibility of introducing graduate degree programs in various accepted professional fields. The most obvious of these for our purposes would be Master's and Doctor's degrees in Education, Engineering, and Business Administration, but the mention of these should not exclude consideration of others. Eventually some colleges and schools will be giving degrees other than the traditional Master's and Ph.D. On the other hand, the powers of the Graduate Dean will need to be strengthened so that centralized control of the quality of the standard M.A. and Ph.D. degrees can be maintained.

We urge the new Dean of the Graduate School to assign high priority to the planning for and organization of the graduate program. These policies and plans should find expression in appropriate administrative channels through which they can be implemented. For example, the structure should provide for the influence of the Graduate Dean in personnel actions of participating departments, as these relate to Graduate School programs.

Research and the University

One of the major functions of the University is to add to existing knowledge or to advance scholarly and creative work. The stature of the

institution is measured, in part, by the scholarly activity of its staff. The prospects for an expanding graduate program, which we advocate, must be solidly based upon an enlarged research effort. This being the case, we recommend appropriate administrative and academic accommodations to promote further University research.

The administration should take immediate steps to formulate a policy and procedures governing sponsored research activity. This should stipulate conditions applying to the application, acceptance and execution of outside grants, contracts and consultative arrangements. It also should express official policy in regard to patents, fees and royalties. A definite formal policy of this nature is presently lacking. The only statements pertaining to this issue are in the Standard Practice Instruction Manual, under "Contracts and Deeds," page 16, and "Research Contracts with Federal Grants," page 18. Contract forms and formal statements of agreement are available, but these documents do not constitute a statement of University research policy.

As part of its service obligation to the community-at-large, we ratify the idea of the University taking the initiative in publicizing, through appropriate means and channels, the research by which (and the appropriate conditions under which) such resources may be shared with organizations, governments and professions requiring this type of service.

We suggest that there be created a central facility where information, applications and descriptive brochures may be accumulated relative to the sponsoring of research in all fields of study. This office ought to aid faculty in the preparation of research proposals, the procurement of funds, the interchange of ideas on methodology, and the identification of areas of current research interest. Particular attention should be paid to preparing and disseminating concise data clarifying the requirements, procedures, hazards, and specific sources of federally supported research projects.

Since the duties of the Graduate Dean have been enlarged to include the role of Coordinator of Research, his office could logically assume these functions, provided requisite personnel is made available to him.

We look forward to accelerated progress by the University Research Council, under the Chairmanship of the Coordinator of Research, in helping to support research in disciplines not generally aided by outside funds and to strengthening and expanding the general University research effort. We recommend continued strong support for the work of the Council, including efforts by the administration to have sponsors adjust overhead and indirect costs at realistic levels. In this fashion, the work of the Council can make possible modest, but important, amounts of money for deserving projects that would otherwise be neglected.

The administration must buttress its recognition that creative faculty activity is to be nurtured, by further reducing heavy teaching loads and extensive committee assignments of faculty engaged in scholarly work. But more progress can be made toward this end. Constructive approaches include more short-term sponsored leaves for attendance at special conferences and seminars, and grants for support of off-campus, but University-related activities, such as surveys and field studies, and for summer research projects. A special canvass should be made to determine the conditions pertaining to the procurement of research equipment and facilities, available under terms specially favorable to educational institutions.

Undoubtedly, lack of adequate funds is a major deterrent. We approve the inclusion in University budget requests of special sums that can serve as revolving funds, without further cost to the Commonwealth, in stimulating a broad array of research projects on a self-sustaining basis. A quarter of a million dollars is, in our judgment, a minimum level of support for initiating the first step in this direction. We encourage the administration

to continue its efforts in creating an awareness among the legislators of the vital importance of such "seed-money" in preserving and promoting the reputation of the University as a national center for research and development.

Institutes

It is heartening for us to observe the establishment of research Institutes. In the recent past the Trustees have authorized the Polymer Research Institute, the Population Research Institute, and the Institute of Agricultural and Industrial Microbiology. We believe continued progress in this direction is a healthy growth factor.

Yet we believe progress can be further promoted by the refinement of University policy to guide this form of growth. Such policy could identify general conditions warranting approval of new Institutes, setting forth minimal criteria of prospective support required prior to authorization, requiring long-range program plans to be submitted by planned Institutes, demanding that anticipated facilities and plant be integrated into the campus master plan, and encouraging interdisciplinary approaches and close liaison with related resident departments and offices. We further recommend that preliminary planning for Institutes be undertaken in cooperation with the Coordinator of Research and the Research Council.

Scholarship and the Creative Artistic Impulse

In view of the scientific and technological emphases at such an institution as ours, it is important in long-range thinking to keep in mind the high potential of the humanistic and artistic disciplines as sources of scholarly productivity and creativity.

Scholarship. An example of this productivity is found in the scholarly work of editing the twelve-volume edition of the Correspondence of Edmund Burke.

Supported by Carnegie Foundation grants, and planned for simultaneous publication by the University of Chicago Press and the Cambridge University Press, this notable interdisciplinary project is being directed by one of our own Commonwealth Professors, working in England under an international board of editorial advisers. The University should make further specific provision for encouraging this type of scholarly leadership by members of the faculty. Such provision calls for a policy recognizing the merits of this sort of service through adequate load-allowances, promotion and public honor.

Scholarly enterprise on a grand scale not only renders direct service in terms of our commitment to the advancement and dissemination of knowledge. It also serves as a force stimulating and promoting further scholarly effort. In this connection the present forms required of those seeking faculty research grants should be modified so as to be better adapted to requests from other fields than merely those of the sciences and related technologies.

Related to this is the stimulus to creative thinking engendered by programs bringing together leaders in different fields of cultural and professional endeavor to study and discuss issues of crucial importance. The Non-Western Studies program, the International Weekend, and the American Humanities Seminars, co-sponsored by the University and the Humanities Center for Liberal Education, are cases in point. These, and similar programs, deserve University support and encouragement.

Artistic Creativity. Learning and technology are not devoid of an appreciation of beauty. But today's dominant outlook centers on the utilitarian aspects of education. A long-range plan for a university will rightfully explore these utilitarian aspects, but it cannot neglect those areas by which the human spirit may be nurtured and cultivated.

Efforts in this direction include concert series and lecture series. Our present programs in these directions show an active response by the

student body. More could be expected with proper facilities. However, participation in these activities is largely passive. We should look forward to developing means whereby gifted students and teachers are able to engage directly in creative production.

Writing poetry doubtless requires as much intellectual effort as the conduct of research. Guidance will be needed, as in research, and the creative impulse can be developed outside the forms set by the syllabus of a course. Hence we will need creative poets and artists in residence who, with criticism and understanding, can help the young mind explore the realms of beauty and human spirit. The demand for such guidance will hardly be excessive, yet funds for employing such talent are much less readily available than for scientific research. An enlightened administration can recognize the need and provide means for the support of such endeavor.

In fostering critical and creative effort in the contemplative and performing arts, the contributions toward this end by the Massachusetts Review are impressive. This Committee views with approval the Four-College support now being provided for the Review, and strongly recommends that the University play a major role in securing major funding of this publication.

The physical facilities needed to develop an adequate program in literature and the arts would include a Fine Arts Center with the following:

(1) an auditorium, with fully equipped stage, suitable for holding large gatherings.

(2) An experimental theatre for student productions of original plays and dramas.

(3) an art museum or gallery, with studios for sculpturing, ceramics, painting, and handicrafts.

In addition, there should be developed a planned program of Library acquisitions in the fields of literature and art adequate to sustain the

activities we have suggested. It is our conviction that a flourishing program of encouragement to the humanities and fine arts can greatly contribute to establishing a pervading tone of scholarship and culture that is the mark of a great University campus.

Professional Training

We have viewed as a concommitant to the University's role as a graduate and research center the function of serving as a major center for professional and advanced technical education. With only a few exceptions, the opportunities for training in the professional and advanced technical occupations are practically nonexistent in the Massachusetts public higher educational system. The State Colleges and the Technological Institutes offer opportunities in certain areas for advanced training. But the traditional professions of medicine and law, and to mention only a few others as dentistry, pharmacy, optometry, and veterinary medicine, are totally unavailable in public higher education in the Commonwealth. The University should promote a full study of this entire area, with the view of providing needed educational services where justified as a natural extension of its existing programs of professional training.

Guidelines for Establishing New Programs

To those who must consider this area of University growth, we offer the following guidelines which we feel are appropriate to be weighed in any study and decision on these matters.

A. Any expanded training programs ought to be germane to the University program as a whole, and should be related to activities that are recognized as being of professional or special technical caliber.

B. Evaluations should be made in terms of social requirements, needs of students, resources of our own and cooperating institutions, and

avoidance of unnecessary duplication.

C. Assessments should include the extent to which related (or pre-professional) programs exist in departments or schools of the University, and their relative strengths.

D. A canvass ought to be made, in each case, of possible sources of support for expanded programs, other than the regular sources of current University support, in order to broaden the revenue base of the institution.

E. A survey would be advisable covering the availability of competent personnel within the present faculty and within the national market in order to insure proper staffing. When plans are made to offer expanded training, special consideration should be given in selecting new staff to those whose specialty can contribute most to the contemplated future program.

Medical Center

At the moment, the needs in the field of medicine have received the most attention and concern. For this reason, the Committee has focused considerable attention on this prospective area of University development.[1]

The Committee considers the establishment of a medical school of high quality to be an appropriate step in the growth of the University. In our judgment, the most harmonious development may be shaped by the following general guidelines:

1. The school should be part of a medical center in which teaching and research are fully integrated. Research facilities carefully

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[1]A separate, preliminary report of the Committee's thinking on the Medical School issue was prepared under the direction of Professor Farquhar. (A limited number of these reports, from which the highlights have been taken for this Report, is available from the Committee Chairman.)

integrating the various medical departments and certain facilities of some other University departments may provide the most effective means for successful operations. An outstanding staff and fully qualified students are essential to form a training and research unit that attracts outside interest and support. Probably an experimental approach is needed, including, as an example, attention to socio-medical training and research. The American Medical Asso-ion's 1961 Convention made clear that research emphasis is on erdisciplinary areas such as psychosomatic medicine, electronics, virology and delicately engineered medical machines.

2. A four-year school is to be preferred to a two-year program. A four-year school better fits the future size and scope of the University. Thus a successful two-year program would be merely transitional, and it is better to plan and build now on a four-year basis than to attempt to achieve the same goal in two stages. Further, recent developments in medical education stress integration of curricula with greater flexibility for training medical students. We also note that the special legislative commission which studied this issue is in unanimous favor of a complete four-year program of professional training at the University.

3. In choice of location we find the following criteria of significance: availability of clinical patients at a minimum of ten beds per senior medical student; a cooperative and coordinated approach between medical and other University staff (including cooperative use of facilities) requiring a location nc further from Amherst than an hour's commuting time; and, the desirability, all other factors being equal, of suitable buildings and physical plant already in existence, for providing a medical science building and general hospital.

4. The medical school would cause some differential in staff salaries. The present maximum for salaries must be raised substantially, not only to obtain qualified medical staff, but because many others on the University staff would be contributing to the operations of the medical school in the areas of cooperative research and teaching. Thus the position of biochemists, microbiologists, food technologists, economists and others who cooperate in the work of modern medical education should be reassessed.

5. In relationships with allied activities already on campus, the following suggestions are offered:

   School of Nursing. Students should take the liberal arts courses in English Composition and Speech, a foreign language, a laboratory science, mathematics, history or government, and fine arts on the Amherst campus. At an early stage the nursing school should be completely integrated with other medical departments.

   Western Massachusetts Division of Public Health. The highest degree of integration ought to be achieved between the Division, the medical center, and the Department of Public Health at the University.

6. The first priority of admissions standards should be to provide a student body of high intellectual quality and sound character. It is expected that preference be given to residents of the Commonwealth, but to insure against an undesirable lowering of standards, no rigid quota, or double standard of admission should be allowed. Strenuous efforts should be made to procure financial assistance for deserving and qualified students from all sources including federal and state governments, foundations, and professional associations. Unless further study finds cogent reasons for determining otherwise, we recommend that in order to encourage the needed numbers of able

students to enter medical training, the tuition rates be identical with those applied to other University students, and any special fees should be based on current practice in other public medical schools.

7. The funds needed to create and maintain the medical school will be on a larger scale than those required for other units of the University. Before the plan for a medical school is finally launched, there should be reasonable assurance of a total sum sufficient to begin a high quality program and to sustain its advancement through subsequent years. A separate budget is recommended for the medical center, as for any other integral part of the University of equal administrative status. If the medical school is to prosper, it must have a large measure of autonomy. Therefore, autonomy for the University, of which the school would be a part, is an essential precondition for the establishment of the school.
8. The proposed school also should have some unique aims and special programs to bring in sufficient outside support. The integrated research facilities that we have urged will help in this objective, especially in terms of federal and foundation funds. The University must be willing to undertake vigorous fund-raising efforts in support of the medical program. We must rely on the people of Massachusetts and their representatives to meet the needs of the state medical school as these evolve. Additional funds can be obtained from other sources in response to effective proposals and plans.
9. The medical school, as well as its associated research institutes, must look to eventual integration with existing or future related

schools such as those of nursing, public health, dentistry, optometry, pharmacy, physical therapy, and social work to form a medical center under the direction of a vice-president directly responsible to the University president. We note with satisfaction that the 1961 recess study commission has called for immediate creation of such a position at an annual salary of $25,000. Proper coordination and leadership of newly appointed personnel, equipment, and building space will require the selection of an undoubted leader in the profession of health education.

We are impressed with the extent of need in the Commonwealth for a public medical school. The 1961 recess study commission report and other information that has come to our attention make quite clear the importance of taking immediate steps to help solve this problem in an area where a "lead time" investment of ten to twelve years is required before practicing physicians become available.

We feel that the State has a duty to provide medical training through the University, where it can develop as part of the comprehensive program of professional education. Prompt action is necessary at a time when there is already an evident shortage of physicians and other medical personnel in the face of growing demands for such services.

Other Professional Training -- Teacher Preparation

In a previous section of this Report, we have indicated additional prospective fields for professional training which ought to be evaluated by the University. At this time we stress especially the vital role of preparing well-qualified teachers, as an integral part of the graduate and professional training programs of the University. We visualize this as the preparation of college and university teachers as well as elementary and secondary teachers. We recommend that the School of Education give serious attention to the present

dearth of doctoral programs in education in public institutions of the State and devote its energies to expanding opportunities in this field. We further recommend that the Graduate School obtain reports on the Ford Foundation-sponsored programs of encouraging the early identification and development of college teaching personnel, and that the Graduate Dean be assigned leadership in exploring ways in which the University can encourage able candidates for college teaching, where their talents are desperately needed.

The University Library

To those acquainted with higher education it will appear obvious, indeed, that the objective we envision for the University in the realms of research, graduate study, and professional training, will require a first-class, strongly supported University Library. Although the support provided by the General Court in recent years for Library acquisitions has been commendable, it must be accelerated if this vital service is to keep pace with the overall growth of the University.

We are aware that the Faculty Library Committee is studying the development of the Library for the next ten-year period. We urge that strong administrative and faculty support be given to the leadership provided by this Library Committee in casting our view of Library resources and services into the future.

We support the following recommendations as fundamental to the building of an adequate University Library:

1. Adequate personnel and financial support of the Library is mandatory if services are to be provided efficiently as part of, and complementary to, academic programs.
2. Continued efforts are needed to overcome the deficiency in present Library holdings incurred through rapid growth of the University

and inadequate support in the past.

3. There is an existing need for subject-matter reading rooms with a carefully selected supply of basic materials on the undergraduate level.

4. In thinking of our own study and research habits, we implore the use of imagination and courage in providing for amenities in Library facilities.

5. If we are to move forward in graduate studies and research, the faculty has a serious obligation to the Library. The academic disciplines have a responsibility to avoid too large a dispersion (and thus a potential dissipation) of limited resources for Library collections. We recommend that departments (and other appropriate acquisition sources) establish areas of specialization in advanced studies in which the Library could, over a period of time, build up substantial strength. The Provost should request the Deans to solicit periodic five-year plans for library acquisitions in their respective fields from the departments and other appropriate units. These plans should reflect the developmental plans of the departments.

   Collateral efforts along such lines could include:

   A. Advisors encouraging students in preliminary thesis work to assess first the Library resources in the area of their tentative topics prior to making a full-scale research study;

   B. Departments exploring joint acquisition opportunities with related departments; and

   C. Filling the "gaps" in such planned acquisition programs by allowing more travel funds for scholars to visit libraries where specialized materials are available and by more extensive use of inter-library loan arrangements.

6. We direct the attention of the administration and faculty to considering appropriate organizational lines of development open to the Library. There obviously must be some form of balance between the academic desirability of ready access of materials close at hand, and the efficient allocation and use of resources in support of library efforts that call for some measure of centralization. In developing their acquisition plans, departments ought to keep in mind the prospects of some form of decentralization short of departmental libraries, such as a separate, centrally located undergraduate library; a main Library devoted to general collections, graduate and research materials, government depository materials, rare works collections and archival materials; and divisional library buildings geographically decentralized in appropriate sectors of the campus related to the emerging areal pattern of the campus.
7. In all Library plans, we urge that sufficient provision be made for study carels and other facilities to serve the research needs of faculty and graduate students.
8. Further to enhance its research service, the Library should receive an allocation from research grants to cover special library costs incurred in servicing the needs of research projects. In grant proposals principal investigators should specify the sums anticipated for library acquisitions and services.
9. The University should continue to seek ways of improving the duplication and reproduction facilities it provides to users of the Library.
10. We urge the Library Advisory Committee, in its thinking of future developments, to explore early the implications of recent and pending developments in computer linkage of collections, rapid reproduction at a distance, and automated shelving and retrieving systems.

The Library is central to the future development of the University. To the extent that we can succeed in building a Library adequate to the objectives we set for ourselves, then to that critical extent we have insured the successful achievement of these goals.

III

"To Extend the University Outreach...."

A land-grant state university has a unique opportunity and obligation to offer its educational resources for the direct service of the people of the state. This obligation ought not to be passively conceded but actively pursued. Staff members have a definite role in meeting the educational needs of the citizenry, through multiple channels appropriate to their particular competences, above and beyond their efforts in meeting their formal campus responsibilities.

These obligations have reciprocal advantages. Experiences at other land-grant state universities have been that active cultivation of responsibilities for off-campus programs result in vigorous disciplinary growth and greater public support. While we are proud of the understanding and support of the University that is growing throughout the Commonwealth, we also recognize that much further progress is needed. Candidly speaking, there is still less appreciation in Massachusetts for the State University than exists in most other states of the nation. In part, we believe this is due to a prevalent public attitude which regards universities, in general, as solely otherworldly institutions totally isolated from day-to-day practicality by impractical theories and odd experimentation. The history of the land-grant movement in Massachusetts, selective and limited as it has been, has not been able to provide sufficient countervailing impact to set the record straight.

This myopic view of educational values is seldom found, however, among those who have benefited from the educational services of institutions of higher learning. Therefore, it appears to us that we must make special efforts to present evidence that intellectual efforts by academicians have real meaning and value to our society. A strong and solidly based program

of University outreach is one of the most effective means of accomplishing this end.

There is an implicit challenge here to extend our concept of identity to include the citizens at large. A program of outr[illegible]n, soundly based on academic resources and extended with a sense of genuine commitment, can achieve this sense of identity. The goal is to engender an affirmative public regard of this institution.

The Requirements of Effective Outreach

This carries certain programmatic requirements. There must be an expansion of outreach activity beyond the traditional and well-accepted agricultural (cooperative) extension program. This must be based upon the foundations cited in the Introduction: an urbanizing, internationally oriented society with increasing interest in continuing education opportunities. Methods of implementation may include extending University hospitality and resources for established organizations and associations; the development of subject-matter conferences and seminars; the establishment of special courses and institutes; the provision for appropriate policies on consulting as a public service as well as a professional service; and the sponsorship of special events and services designed to enhance the cultural and general welfare of the Commonwealth.

We recommend studies and appropriate actions be taken to insure proper development of the following areas of potential University outreach:

1. Consultation with the Division of Extension, Department of Education, for the purpose of clarifying respective roles and functions and to enrich and broaden the total extension opportunities available to the citizens of the State.
2. Establishment of a constructive, guiding University policy on

creation and operation of bureaus. Such policy should include encouragement of close liaison with respective resident departments as a means of building more effective bridges between the academic community and the community at large.

3. Initiation of a Center for Continuing Education of sufficient scope and resources to serve as the on-campus facility for local, state, regional, national and international meetings and conferences.
4. Promotion of educational television (ETV) with emphasis upon network affiliation and with awareness of the growing potential of federal support in this area. General policies governing such a facility ought to be based upon the AAUP "Policy on Educational Television."[1]
5. Exploration of the opportunities and requirements for University outreach in serving the national programs of overseas educational and developmental assistance.
6. In these areas attention should be given to the value of cooperative efforts among neighboring institutions of higher learning in engaging in such programs.

We stress that programs which are properly conceived and executed in University extension will be a broadening influence and stimulus to academic effectiveness. It is important, of course, that due allowances are made for time and load limitations that would be placed upon staffs engaging in these activities.

Organization

In the realm of organizing University outreach, official administrative sanction and the establishment of a "public service" concept on the campus are essential first steps. With few exceptions, outside of the College of

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[1]AAUP Bulletin, June 1961, p. 145.

Agriculture, we have never had this in an adequate manner. Effective leadership from the administration is a prerequisite to proper organizational efforts.

We are aware that the Agricultural Extension Service is reviewing its role and functions. While the basic value of the Service cannot be denied, we feel this value can be increased by projecting its general concept across the University structure. We should capitalize on its value as a going concern with a strongly supportive clientele and a staff trained and experienced in institutional outreach. We do not believe that there should be two organically separate (and inevitably competing) organizational structures for University outreach. Here is one area where our slower and more limited development in total outreach can profit by avoiding the organizational dilemmas now confronting other universities. This would require close integration of the outreach service with the respective residence departments in all disciplinary fields.

Facilities

The physical facilities of a public university belong to the public and utilization should be promoted to the maximum extent compatible with primary academic functions. Extra-academic use of facilities ought not to be considered as "incidental" or "off season" use, but as a legitimate function of the plant.

If this is so, as we believe, then special planning of academic facilities is required to be compatible with this dual function of plant. We recommend that in developing residence, dining, classroom and recreational facilities, the Master Planning Council seek to provide whenever possible for this "duality" of use.

The evidence from other dynamic state universities indicates a need on this campus for certain facilities whose primary use is to serve the outreach function. In addition to promoting extension programs through actual use,

special facilities can provide tangible evidence of the University commitment to render public service.

Financing

We know that the program of outreach for which we have called will require support in terms of finances, staff and time allocations. We feel there are two advantageous offsets available in this regard. We believe there is room for extending some extra-academic activity, beyond present levels, within existing resources provided these can be organized and marshalled. Further, we note that the tradition of general extension has been usually based on the principle of partial self-support. Once the basic commitment is undertaken, we believe ways and means can be developed to support these programs at reasonable levels of service.

Public Information

Intrinsic to the public service concept for our University is the need for a greatly expanded process of educating the citizens of the Commonwealth in the activities, the methods, and the objectives of the University. The public needs to be kept broadly informed, not only because such information is necessary to intelligent decision-making by the citizens concerning the future of their University, but also because such information, in itself, is a direct contribution to the continuing education of our citizenry. The dissemination and interpretation of knowledge about the University's present services and its future efforts merit greatly increased support and staffing.

The flow of public knowledge about the University is important, also, for another aspect of the University's program to strengthen its services. This is the attraction of desirable, new staff members. Public recognition of their services also is a factor making for heightened morale and the desire to remain on the part of those already associated with the University.

For several reasons, this Committee strongly urges that the whole educational service of disseminating and interpreting knowledge about the University be moved to a central position in long-range academic planning.

As the land-grant State University, we must recognize the uniqueness of our obligations and roles. While we must always strive to meet standards of academic excellence, we must not allow this obligation to confuse us as to appropriateness of functions. Uniqueness of educational function is no bar to academic respectability and prestige. The University of Massachusetts is the only educational institution in the State whose heritage and resources make it primarily responsible for upholding the public service concept that is unique to the land-grant movement and that now enjoys world-wide emulation.

IV

"To Establish the University as the Capstone of Public Higher Education...."

As the State University we are closely bound to the structure of education existing within the Commonwealth and the region. Evaluation of the relationships involved in this ecological matrix has led us to assess various facets of future University development as the capstone, or leading institution, of public higher education in the State.

University Branches

We feel that at the present time there is no need for full-scale branch campuses of the University. A constructive step might be taken, however, by the establishment of centers for liaison and coordination in the metropolitan areas which would serve as the headquarters for public service activities and as information centers for those desiring data and advice about University admissions, requirements, and programs. These centers could later be modified if the need so warranted.

Relations with Community Colleges

Our Regional Community Colleges have a great potential for growth. We anticipate that from this new system there will arise fresh and eager educational leadership seeking working relationships with the University for those of their graduates who desire to complete degree programs. We believe the University has an opportunity for real service in thus aiding these Colleges to carry their full role in our educational system.

The University, therefore, should develop programs and facilities for accepting all qualified transfer students who have completed programs in the Community Colleges and who seek admission to the campus. This will

require:

1. The establishment of special courses for transfer students to enhance their educational experience at the University and to insure an effective transition to the campus.
2. The development of methods of assessing educational accomplishment which may be superior to credit counting.
3. The mutual building of a continuous and cooperative program of admissions standards and guidance services from the time of entry into the Community Colleges through graduation from the University.
4. The cooperative exchange of classification test data, personnel records and research.
5. The assessment of University potential in applied areas (i.e., Stockbridge School) for developing specialized training for certain graduates of the Community Colleges who are not degree candidates but who desire special training.
6. The arrangement of cooperative work in adult and continuing education programs with recognition that the special facilities for introductory and basic course work at the Colleges can be complemented by the University's resources in advanced and special areas.

We recommend that the University solicit foundation support in developing special fellowships or internships for the training of Community College teachers. The University should sponsor, in cooperation with the Community Colleges, joint programs involving summer workshops and seminars in various academic areas as a means of encouraging continuous staff development in the Colleges. Special educational facilities and resources should be shared with the Community Colleges. We believe there is a need for special personnel to serve as liaison during the formative years of this emerging relationship.

Relations with State Colleges

To serve as a focal point and coordinating influence for public higher educational programs, the University must take the initiative in developing viable and constructive relations with the State Colleges. This policy should lead the University to seek cooperative action on the following objectives:

1. The elimination of unnecessary duplication of effort.
2. The creation of a united policy on matters of general concern in public higher education in the State.
3. The improvement of the climate of public opinion concerning public higher education in the Commonwealth.

To do its part in achieving these goals, the University must give evidence of a willingness to assist the State Colleges in their efforts to transform themselves from teacher colleges into first-rate liberal arts institutions. Specifically, this would involve attention to the following areas, among others:

1. To make University staff available to advise the Colleges on matters of personnel, program, and similar matters.
2. To organize state-wide associations in the various academic disciplines to consider problems of mutual concern and to improve the quality of instruction.
3. To study ways in which the University Library might assist in this effort.
4. To make it possible for qualified students to transfer to the University whenever they are otherwise unable to satisfy their professional training needs.
5. To encourage qualified graduates of State Colleges to pursue graduate work at the University.

The basic approach in relationships with the State Colleges should be one of friendly competition; friendly in the sense of mutual efforts to provide a broad and adequate range of educational opportunities through the public system of higher education, and competitive in the sense of a healthy drive to improve the caliber of public higher education.

Four-College Program Cooperation

It is a source of pride to note the accomplishments of the cooperative relationships we have with Amherst, Mount Holyoke and Smith Colleges. We urge the Four-College Program be continued and that new areas of joint effort be encouraged.

We believe that continued Four-College cooperation will contribute to enriched educational opportunities, to the recruitment of superior faculty, and to the attraction of highly qualified students. As a basic principle in the cooperative program we believe arrangements should be such that none of the four institutions loses its own identity. On this basic principle we suggest the following as appropriate for further development of the Four-College Program:

A. Courses and Programs of Study

1. The present Four-College Department of Astronomy should be continued and strengthened. It already has established an excellent reputation, and its existence makes possible a better course of study than could be maintained singly by the cooperating institutions.
2. Consideration should be given to establishing more joint Four-College departments. We recommend that the Four-College Deputies look into areas where the number of major students at the institutions is low and recommend to the four Presidents areas deserving of joint department status.

3. The feasibility of offering more courses on a cooperative basis at both graduate and undergraduate levels should be considered. This would be particularly advantageous in areas where the present size of departments is large enough to rule out the advisability of forming joint departments.
4. Cooperative graduate work should be continued and extended. The possibilities of cooperative Master's Degree programs should be thoroughly explored.
5. Cooperative planning of special study areas should be extended. The highly successful Non-Western Studies program ought to encourage faculties to discuss similar plans and to apply, on a Four-College basis, for foundation grants to implement these plans.
6. Cooperative research projects among all, or any, of the four institutions should be stimulated. This is especially appropriate in areas demanding unusually expensive equipment or facilities.
7. Consideration should be given to Four-College cooperation in the field of adult education. Such an arrangement could provide courses of high quality during evening and late afternoon hours.
8. The policy of permitting qualified students at one institution to take courses at any of the others (providing he needs the course and it is not offered on his "home" campus) should be continued, especially where small enrollments might otherwise result from establishing or continuing a course at the other institutions. This opportunity should apply to both graduate and undergraduate courses.
9. It would be useful if registration procedures, as they affect the Four-College Program, could be coordinated. The use of data

processing equipment should make this a more efficient operation.

10. Steps should be taken to coordinate the academic calendars and schedules of the four institutions, including vacation and examination periods. We realize this may not be possible under the goals and objectives of each institution. We point, however, to the present difficulties many students face in trying to adjust course schedules under the diverse systems now in effect. One institution, for example, has a group of courses meeting Monday through Wednesday, and another group of courses meeting Thursday through Friday. The other three institutions follow a more typical sequence of classes meeting on alternating days of the week.

B. Non-Course Programs

1. The Hampshire Inter-Library Center should be enlarged. This agency is performing an invaluable service and operations might well be broadened at other appropriate areas.
2. The Joint Calendar of Major Events at each institution should continue to be published for each semester. The usefulness of the Calendar will be enhanced if methods can be found to print and distribute the Calendar closer to the beginning of each semester.
3. Institutional committees in charge of lectures, musical events and art exhibits should be encouraged to cooperate in every way. This could include not only prior consultation, but occasional pooling of funds to support exceptional programs.
4. Cooperation should be sought in the purchase and use of films and other audio-visual aids. Eventually a central Audio-Visual Center may be established, with branches at each institution.

Because of the special campus and extension demands, the University should continue to strengthen its own audio-visual resources.

5. The FM Educational Radio Station, WFCR, should be continued, along with the policy of cooperation with the educational radio network (WGBH in Boston). In addition, the institutions should make definite plans to contribute, under competent direction, live programs of their own.
6. Plans should be formulated for establishing a Four-College Educational Television Station with affiliation in ETV networks. Outside funds should be sought for this purpose. The Federal Government and foundations are interested in supporting this type of development, particularly when original and interesting approaches are planned.
7. A feasibility study should be launched on the establishment of a closed circuit TV system between the Four Colleges.
8. The advisability of establishing a Four-College Press ought to be explored. There seem to be considerable economic and academic advantages in such an approach and the present University ad hoc faculty committee studying the matter of a Press should be directed to discuss this with representatives of the other institutions.
9. Continued support should be given to the idea of a Four-College Natural History Museum. Each institution has sent data to the President of Smith College at his request for examination by a museum expert. The resulting report should be carefully studied, and if favorable, funds should be sought for building and maintaining such a museum.
10. Serious consideration should be given to establishing a Four-

College computing and data processing center. This would facilitate, under standard procedures, the present patterns of use now made by institutional faculties of the University Center.

C. Staff and Services

1. The employment of a full-time Four-College Coordinator should be continued. As the one person who assists at nearly all official Four-College meetings, the Coordinator provides invaluable service to all four institutions. He also serves as a resource person to departments and schools interested in exploring new approaches in the cooperative program.
2. The joint appointment of members of the faculty should be continued and extended. This is especially true for important areas that do not demand full-time service of a faculty member at any one institution. An example is the History of Science program.
3. The Four-College Office of Teaching Assistance should be continued and all department heads should be kept informed of personnel available. This service should prove to be of increasing importance as the shortage of qualified college teachers becomes more acute. Provision should be made for keeping files up-to-date.
4. The Four-College bus service should be continued and extended as the need arises. This is an essential service contributing to successful cooperation.

In concluding our remarks on the Four-College Program, we urge consultations among participating institutions on the long-range prospects of the Program. We suggest, for example, that consideration be given to the establishment of a separate corporation to administer many of the activities

of the four institutions. Such a corporation would be empowered to receive and disburse funds and could serve as a potential nucleus for any new college which might be desired. We realize such a proposal as this requires careful and thorough study. But forward thinking is necessary if we are to build on the successful achievements of the present Four-College Program.

New England Regional Cooperation

The University of Massachusetts participates in the cooperative regional program, sponsored by the New England Board of Higher Education, which operates as follows:

A. Preferential Admission. Qualified New England residents are given preferential admission in relation to other nonresidents of certain specialized programs at each of the six State Universities.

B. In-State Tuition and Fees. Students accepted under the program are granted the benefit of in-state tuition and fees.

C. Cooperative Advantages. The program makes available to residents of all New England states a wide choice of programs at low cost, with minimum duplication of specialized staff and facilities in each state.

The Committee recommends the continuation of the present cooperative program, including admissions policy whereby each university gives first priority to qualified students from its own state and second priority to students applying under the regional program, and wherein each university continues to maintain control over its own courses and programs.

A number of programs involved in the NEBHE plan are directly or indirectly related to agricultural education. Inasmuch as NEBHE is undertaking a comprehensive study dealing with agriculture in New England, we refrain from any recommendations in this area until the report of this study becomes available.

On the basis of the principles and programs we have put forth, it is possible for the University to develop a constructive set of relations with its colleagues in the field of higher education. We urge that this area of University development be given careful and continuous attention by the officers and faculty of the University to insure that the University meets its obligations as the capstone of public higher education in the Commonwealth.

EPILOGUE

We cannot conclude this interim Report without stressing the need for some form of sustained long-range perspective in viewing University development. Whether or not this form is based upon a formally continuing method, such as this Committee, or upon other means, is less important to our minds than the commitment to sustain forward thinking in the University community. Undoubtedly a supplementary method is by establishment of special committees, as we have recommended at various points, to study and recommend on specific issues and problems. Perhaps a joint endeavor between administrators and deans with on-going responsibilities in planning and faculty members with academic perspective would likewise be an appropriate supplementary means.

Regardless of method, the basic need to stimulate and promote long-range thinking exists. We visualize this process to include the following responsibilities, among others:

1. To assess the extent of progress made under the suggestions contained in this Report and subsequent plans developed therefrom.
2. To state in more specific terms some of the goals now visualized dimly.
3. To determine the degree of modification required by unanticipated developments.
4. To redirect goals and plans on the basis of subsequent events.
5. To push forward to new frontiers the long-range academic thinking of the University.

We invite discussion and debate upon this Report. We encourage action and initiative upon its suggestions and recommendations. We believe that in this process there will develop more fully the sense of identity and commitment which will become the hallmark of the University of Massachusetts as it moves into its second century of service to the Commonwealth and the people.

THE LONG RANGE ACADEMIC PLANNING COMMITTEE

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